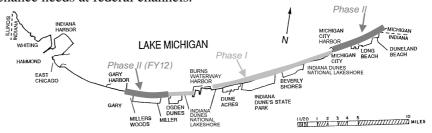


Regional Sediment Management Program LRC Lower Lake Michigan/Indiana



Description

Regional littoral processes in the study area were altered during the 20th century by the construction of many shore protection and navigation structures including breakwaters, jetties, and bulkheads. Continual changes along the Indiana shoreline have been a concern for USACE and many stakeholders in the study area for decades. The current effort builds on FY11 efforts to catalog existing historical and contemporary data to document bathymetry and littoral processes along the Indiana shoreline and develop a sediment budget for the project area. This data will provide a consistent foundation for formulating solutions to address the impacted littoral processes along the shoreline and future maintenance needs at federal channels.



Issue/Challenges

Since several agencies and entities use, maintain, and have jurisdiction along reaches of the shoreline, studies are generally focused on an individual Federal channel or particular reach of the shoreline instead of as a system where opportunities to utilize sediment more efficiently as a resource can be realized.

Successes Lessons Learned

Building on the work conducted in FY11, the District has gathered additional historical reports documenting historical cross-shore profiles.

Expected Products

- Expanded coastal geodatabase for Lower Lake Michigan Shoreline
- Expanded regional sediment budget for reaches east and west of FY11 study area
- Recommendations for optimizing future shoreline management practices
- Documentation of study findings

Potential Users

USACE, National Park Service (NPS), Indiana Department of Natural Resources (IDNR), Indiana Geological Survey (IGS)

Projected Benefits

The District will be able to better plan for maintenance dredging and evaluate potential measures to minimize future dredging needs. Data will be available to other state and Federal agencies.

Leveraging Opportunities

The data gathered for this project will be used to optimize existing O&M activities, to inform analyses conducted for the Burns Harbor Shoreline Damage Mitigation Feasibility Study, and be made available to other agencies studying and maintaining this shoreline.

Points of Contact

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Participating Partners

Indiana Department of Natural Resources, National Park Service, Indiana Geological Survey